

CUSTOMER NO.: 24498
Serial No. 10/576,665
Office Action dated: 3/31/10
Response dated: 8/19/10

PATENT
PF030161

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Amendments to the Claims

Please amend the claims as follows:

1. (Currently Amended) Method for detecting the orientation of an image, comprising the steps of:
 - detecting ~~the~~ lines in the image,
 - calculating, for each line detected, attributes characterizing each line, ~~said attribute classifying each line as being an horizontal or vertical line,~~
 - classifying each line into angular intervals according to its orientation,wherein ~~it~~ the classifying comprises the step of
 - providing to a learning-based decision system, said attributes and the number or lines in each angular interval,
 - detecting the orientation of the image by comparing said attributes with system models from the learning-based decision system. ~~according to the ratio of horizontal lines and vertical lines in the image.~~
2. (Currently Amended) Method according to Claim 1, wherein the step of detecting the lines in the image comprises: ~~the substeps of~~
 - detecting contours, and
 - thresholding the gradient of luminance of the points belonging to each contour detected.
3. (Cancelled)
4. (Currently Amended) Method according to Claim 1, ~~wherein it comprises further~~ comprising a step of detecting the inclination of the lines detected, and that the attributes characterizing the lines detected of the image comprise parameters relating to the inclination of the lines.
5. (Cancelled)

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6. (Currently Amended) Device for detecting the orientation of an image, ~~wherein it comprises comprising means for:~~

- means for detecting the lines in the image,
- means for calculating, for each line detected, attributes characterizing this line,
- means for classifying each line into angular intervals according to its orientation,
- wherein the means for classifying comprises
- means for providing to a learning-based decision system, said attributes and the number or lines in each angular interval,
- means for detecting the orientation of the image by comparing said attributes with system models from the learning-based decision system.
~~as a function of the attributes of the set of lines detected.~~

7. (Cancelled)

8. (New) A non-transitory computer readable medium having a computer program thereon for performing a method for detecting the orientation of an image, comprising the steps of:

- detecting lines in the image,
 - calculating, for each line detected, attributes characterizing each line,
 - classifying each line into angular intervals according to its orientation,
- wherein the classifying comprises the steps of:
- providing to a learning-based decision system, said attributes and the number or lines in each angular interval, and
 - detecting the orientation of the image by comparing said attributes with system models from the learning-based decision system.